

CLAIMS:

What is claimed is:

- 1 1. A system for facilitating consolidated billing within a
2 converging telecommunications network, comprising:
3 a network resource control facility communicating with and
4 controlling a plurality of network resources within a merged
5 telecommunications network to deliver at least one merged
6 communications service, each network resource of said plurality
7 of network resources configured to provide a communications
8 function and to generate corresponding billing data, said network
9 resource control facility configured to consolidate said billing data
10 from at least one network resource from said plurality of network
11 resources in real-time related to at least one telecommunications
12 service provided within said telecommunications network to
13 generate consolidated billing data; and
14 an interface facility accessible via a network connection
15 and configured to access said network resource control facility to
16 receive said consolidated billing data to produce a consolidated
17 billing notice related to said at least one telecommunications
18 service.
- 1 2. The system according to claim 1, wherein said
2 communications service includes dynamic allocation of bandwidth
3 provided by said at least one network resource, said consolidated
4 billing data including billing data related to bandwidth allocation.
- 1 3. The system according to claim 1, wherein said
2 communications services includes voice and data network
3 resources from said plurality of network resources, said
4 consolidated billing data including billing data related to voice and
5 data communication functions.

4 a network management facility communicating with and
5 controlling disparate telecommunications devices within a
6 telecommunications network, wherein said network management
7 facility automatically configures and controls said disparate
8 telecommunications devices within said network in real-time;

9 a database facility storing inventory data related to said
10 disparate telecommunications devices within said network, said
11 database facility also storing billing data generated by each of
12 said disparate telecommunications devices; and

an interface accessible via a network connection, coupled to said database facility and configured to access said network management facility via said network and to provision at least one of said disparate telecommunications devices to provide at least one communication service on-demand and in real-time based upon corresponding inventory data stored by said database facility, and to access said database facility to consolidate said billing data to generate a consolidated billing message.

1. ² 13. The system according to claim ¹ 12, wherein said database
2 maintains address, communication protocol, manufacturer and
3 vendor information corresponding to said disparate
4 telecommunications devices within said network.

1 ~~3~~³ 14. The system according to claim ~~12~~¹, wherein said
2 communication service includes bandwidth allocation to an
3 Internet customer.

1 ⁴ 15. The system according to claim ¹ 12, wherein said interface is
2 further configured to access said network management facility
3 and to provision said network in order to monitor and route traffic
4 through said network.

1 ⁵16. The system according to claim ¹~~12~~, wherein said interface is
2 further configured to access said network management facility and
3 to provision said network in real-time.

1 ⁶17. The system according to claim ¹~~12~~, wherein said network
2 management facility communicates with said disparate
3 telecommunications devices using a standard communications
4 protocol.

1 ⁷18. The system according to claim ⁴~~15~~, wherein said standard
2 communications protocol is the H.323 protocol.

1 ⁸19. The system according to claim ¹~~12~~, wherein said disparate
2 telecommunications devices include switches, routers,
3 gatekeepers, servers, and interactive voice response units
4 (IVRU).

1 ⁹20. The system according to claim ¹~~12~~, wherein said consolidated
2 billing message is made available to a customer via the Internet.

1 ¹⁰21. The system according to claim ¹~~12~~, wherein said consolidated
2 billing message includes billing data generated by a plurality of
3 telecommunications devices based on said at least one
4 communications service.

1 ¹¹22. The system according to claim ¹~~12~~, wherein said consolidated
2 billing notice includes references to billing data provided by at
3 least one telecommunications provider corresponding to said at
4 least one telecommunications device.

1 ¹²23. The system according to claim ¹~~12~~, wherein said consolidated
2 billing notice is accessible via said telecommunications network in
3 real time.

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1 ~~24.~~ The system according to claim ~~1~~¹², wherein said consolidated
2 billing notice is accessible via the Internet in real time and during
3 the provisioning of said at least one communications service.

1 25. A method for self-provisioning and billing for communications
2 services within a merged telecommunications network, comprising
3 the steps of:

4 determining a communications service to be provided;

5 automatically identifying network resources within a
6 merged telecommunications network to be configured and
7 controlled to provide said communications service;

8 automatically configuring said network resources in real-
9 time to provide said communications service;

10 collecting billing data generated by each network resource
11 configured to provide said communications service; and

12 generating a consolidated billing data based on said billing
13 data generated by each network resource configured to provide
14 said communications service.

1 26. The method according to claim 25, further comprising the step
2 of storing said consolidated billing data to be accessible via said
3 telecommunications network.

1 27. The method according to claim 25, further comprising the step
2 of storing said consolidated billing data to be accessible via the
3 Internet.

1 28. The method according to claim 25, wherein said consolidated
2 billing data includes data generated by at least one service
3 provider in real time and during the provision of said
4 communications service.

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1 4. The system according to claim 1, wherein said interface facility
2 permits access to said network resource control facility via the
3 Internet.

1 5. The system according to claim 4, wherein said interface facility
2 permits access via the world wide web.

1 6. The system according to claim 1, wherein said network
2 resource control facility communicates with said plurality of
3 network resources using a standard communications protocol.

1 7. The system according to claim 6, wherein said standard
2 communications protocol is the H.323 protocol.

1 8. The system according to claim 1, wherein said plurality of
2 network resources switches, routers, gatekeepers, servers, and
3 interactive voice response units (IVRU).

1 9. The system according to claim 1, wherein said consolidated
2 billing notice includes references to billing data provided by at
3 least one telecommunications provider based on allocation of said
4 at least one network resource.

1 10. The system according to claim 1, wherein said consolidated
2 billing notice is available via said telecommunications network in
3 real time.

1 11. The system according to claim 1, wherein said consolidated
2 billing notice is accessible via the Internet in real time and during
3 the provisioning of said at least one telecommunications service.

1 12. A system for provisioning on-demand communications
2 services and for consolidating billing data related to said services,
3 comprising:

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